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## UNITED STATES COPYRIGHT OFFICE



# Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201

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#### ITEM A. COMMENTER INFORMATION

These comments are respectfully submitted by Public Knowledge. Public Knowledge is a nonprofit organization dedicated to representing the public interest in digital policy debates. Public Knowledge promotes freedom of expression, an open internet, and access to affordable communications tools and creative works.

Interested parties are encouraged to contact Meredith Rose (mrose@publicknowledge.org) as Public Knowledge's authorized representative in this matter. Public Knowledge's contact information is as follows:

Public Knowledge 1818 N St. NW Suite 410 Washington, DC 20036 (202) 861-0020

#### ITEM B. PROPOSED CLASS ADDRESSED

Proposed Class 1: Audiovisual works – criticism and comment.

#### ITEM C. OVERVIEW

### ITEM D. TECHNOLOGICAL PROTECTION MEASURE(S) AND METHOD(S) OF CIRCUMVENTION

Opponents do not attempt to rebut proponent BYU's argument that "optical drives are becoming increasingly rare in new computers"; instead, Opponents imply that the lack of access to optical drives is the result of an irrational decision by the institution. In Opponents' view,

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The authority for requesting this information is 17 U.S.C. §§ 1201(a)(1) and 705. Furnishing the requested information is voluntary. The principal use of the requested information is publication on the Copyright Office Web site and use by Copyright Office staff for purposes of the rulemaking proceeding conducted under 17 U.S.C. § 1201(a)(1). NOTE: No other advisory statement will be given in connection with this submission. Please keep this statement and refer to it if we communicate with you regarding this submission.

proponents "identif[y] a problem that is not caused by access controls, but by [Proponents'] decision to stop supplying its classrooms with devices capable of playing optical discs." Opponents fail to mention, however, that optical drives *are* disappearing from the retail market, leaving institutions few to no options for providing classroom disc-playback capabilities.

The top four personal computer manufacturers by market share are HP (21.0%), Lenovo (20.8%), Dell (15.2%), and Apple (7.4%).<sup>2</sup> Among all commercially available HP laptops, only one product line (the HP ProBook series) comes with (optional) optical drives.<sup>3</sup> Lenovo fairs slightly better, with optical drives included in eight out of their 47 offered models.<sup>4</sup> Dell offers only two models (Inspiron 15 3000 and 5000 editions) with optical drives.<sup>5</sup> And in 2016, Apple discontinued internal optical drives altogether.<sup>6</sup> The abandonment of optical drives has impacted major software design as well; Microsoft dropped native Windows support for DVD playback back in 2012, citing the need for "specialized set of decoders (and hardware) that cost a significant amount in royalties." Neither Windows 8 nor Windows 10 have native DVD support, though Windows 10 users can purchase a (poorly-reviewed)<sup>8</sup> \$15 app from the Windows store that allows bare-bones DVD playback.

The abandonment of optical drives is the result of market preference for smaller, lighter form factors; declining reliance on physical media for software delivery; and increasing internal hard drive storage capacity. The trend itself—as well as the reasons behind it—is a regular topic

<sup>&</sup>lt;sup>1</sup> Joint Creators and Copyright Owners comments at 21.

<sup>&</sup>lt;sup>2</sup> "Gartner Says Worldwide PC Shipments Declined 2 Percent in 4Q17 and 2.8 Percent for the Year", Gartner (Jan. 11, 2018), https://www.gartner.com/newsroom/id/3844572.

<sup>&</sup>lt;sup>3</sup> Laptops, HP, <a href="http://store.hp.com/us/en/cat/laptops">http://store.hp.com/us/en/cat/laptops</a> (last visited Mar. 14, 2018).

<sup>&</sup>lt;sup>4</sup> ThinkPad P70, ThinkPad E570, ThinkPad E575, IdeaPad 110, IdeaPad 310, IdeaPad 320, IdeaPad 510, and IdeaPad 520 models come with optical drives included. *Laptops*, Lenovo, https://www3.lenovo.com/us/en/laptops/c/LAPTOPS (last visited Mar. 14, 2018).

<sup>&</sup>lt;sup>5</sup> Laptops, Dell, <a href="http://www.dell.com/en-us/shop/dell-laptops/sc/laptops">http://www.dell.com/en-us/shop/dell-laptops/sc/laptops</a> (last visited Mar. 14, 2018).

<sup>&</sup>lt;sup>6</sup> See Joe Rossignol, "Apple No Longer Sells a Mac with a CD Drive," MacRumors (Oct. 27, 2016), <a href="https://www.macrumors.com/2016/10/27/apple-discontinues-non-retina-macbook-pro/">https://www.macrumors.com/2016/10/27/apple-discontinues-non-retina-macbook-pro/</a>. See also Josh Lowensohn, "Apple's plan to wipe out disc drives is nearly complete," CNet (Oct. 26, 2013), <a href="https://www.cnet.com/news/apples-plan-to-wipe-out-disc-drives-is-nearly-complete/">https://www.cnet.com/news/apples-plan-to-wipe-out-disc-drives-is-nearly-complete/</a>;

<sup>&</sup>lt;sup>7</sup> Steven Sinofsky, "Making Windows Media Center available in Windows 8," Microsoft Developer Network (May 3, 2012),

https://blogs.msdn.microsoft.com/b8/2012/05/03/making-windows-media-center-available-in-windows-8/

<sup>&</sup>lt;sup>8</sup> Ian Paul, "How to play DVDs in Windows 10 for free," PCWorld (Feb 9, 2018) https://www.pcworld.com/article/2953724/windows/how-to-play-dvds-in-windows-10-for-free.html.

<sup>&</sup>lt;sup>9</sup> See, e.g, Mark Kyrnin, "Death of the Computer Optical Drive," Livewire (Aug. 12, 2017), <a href="https://www.lifewire.com/death-of-the-computer-optical-drive-832403">https://www.lifewire.com/death-of-the-computer-optical-drive-832403</a>.

of industry press. As one publication notes, "finding a PC that includes any sort of optical drive is becoming very difficult. ... It is almost certain that the drives will be completely removed from most mobile computers in the near future." Another introduced its buying guide ("11 Laptops That Still Come With DVD and CD Drives") by commenting that "[t]hey're getting rarer every day, but there are also a few laptops on the market that still come with built-in DVD drives." Another describes them as "almost an obsolete feature on portable computers," while yet another comments that "Built-in optical drives have become fairly rare, even for business laptops." The top answer to a Quora discussion on the topic says that drives "aren't practical any more [sic]," citing increasing onboard storage capacity. 14

The hard reality is that computer manufacturers are abandoning the optical drive standard. Ignoring this fact, Opponents advocate that educational institutions should remain beholden to outmoded technology in order to comply with arbitrary legal designations. Given the importance of computer access in higher education, the answer to the issues posed by the proposed expansion cannot simply be a mandate to "buy older machines"—it must reflect the reality of the market in which these institutions must participate.

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<sup>&</sup>lt;sup>10</sup> *Id*.

<sup>&</sup>lt;sup>11</sup> Henry T. Casey, "11 Laptops That Still Come With DVD and CD Drives," LaptopMag (Feb. 9, 2018) <a href="https://www.laptopmag.com/articles/laptops-with-disc-drives">https://www.laptopmag.com/articles/laptops-with-disc-drives</a>.

<sup>&</sup>lt;sup>12</sup> "Mark," "Netbooks with DVD drive- why are these types of mini laptops so rare?", TLBHD.com (Jun. 4, 2014), <a href="https://tlbhd.com/netbooks-dvd-drive-types-mini-laptops-rare-12905/">https://tlbhd.com/netbooks-dvd-drive-types-mini-laptops-rare-12905/</a>.

Brett Nuckles, "Best Laptops for Business With Optical Drives 2017," Tom's IT Pro (Sep. 14, 2016), <a href="http://www.tomsitpro.com/articles/best-optical-drive-business-laptops,2-1086.html">http://www.tomsitpro.com/articles/best-optical-drive-business-laptops,2-1086.html</a>.
"Why are Optical Drives missing in new Laptops?", Quora, <a href="https://www.quora.com/Why-are-Optical-Drives-missing-in-new-Laptops">https://www.quora.com/Why-are-Optical-Drives-missing-in-new-Laptops</a> (last visited Mar. 14, 2018).